Claims

1. A gas generating composition comprising a fuel component, an oxidizing agent and at least one additive, which further comprises nitrogenous organic compound used as said fuel component, ammonium perchlorate and nitrate of alkaline metal or alkaline earth metal used as said oxidizing agent and in which where a quantity of nitrate required solely for forming an oxide of alkaline metal or alkaline earth metal that can stoichiometrically neutralize hydrogen chloride generated from ammonium perchlorate is taken as 1, a quantity of nitrate of said alkaline metal or alkaline earth metal exceeds 0.9.

2. A gas generating composition according to Claim 1, which comprises 35-60 weight % nitroguanidine used as said fuel component, 15-30 weight % ammonium perchlorate and 20-40 weight % nitrate of said alkaline metal or alkaline earth metal used as said oxidizing agent.

3. A gas generating composition according to Claim 1, which comprises 20-45 weight % aminotetrazole used as said fuel component, 20-40 weight % ammonium perchlorate and 25-55 weight % nitrate of said alkaline metal or alkaline earth metal used as said

oxidizing agent.

4. A gas generating composition according to Claim 2 or 3, wherein a material of said additive is a binder, and 2-10 weight % hydrotalcites expressed by the following formula are contained as said binder:

$$[M^{2+}{}_{1-x}M^{3+}{}_{x}(OH)_2]^{x+}[A^{n-}{}_{x/n}\cdot mH_2O]^{x-}$$

where M^{2+} represents bivalent metal including Mg^{2+}, Mn^{2+}, Fe^{2+}, Co^{2+}, Ni^{2+}, Cu^{2+} and Zn^{2+};

M^{3+} represents trivalent metal including Al^{3+}, Fe^{3+}, Cr^{3+}, Co^{3+} and In^{3+};

A^{n-} represents an n-valence anion including OH^-, F^-, Cl^-, NO_3^-, CO_3^{2-}, SO_4^{2-}, $Fe(CN)_6^{3-}$, CH_3COO^-, ion oxalate and ion salicylate; and

x: $0 < x \leqq 0.33$.

5. A gas generating composition according to Claim 4, wherein said hydrotalcites are synthetic hydrotalcite or pyroaurite expressed by the following formulas:

(Synthetic hydrotalcite)

Chemical formula: $Mg_6Al_2(OH)_{16}CO_3\cdot 4H_2O$

(Pyroaurite)

Chemical formula: $Mg_6Fe_2(OH)_{16}CO_3\cdot 4H_2O$

6. A gas generating composition according to Claim 1, wherein said material of said additive is a catalyst for enabling an autoignition of said gas generating composition (autoignition capability

developing catalyst) and 0.05-5 weight % at least one molybdenum compound selected from the group consisting of molybdenum trioxide, molybdic acid, ammonium molybdate, sodium molybdate, phosphomolybdic acid, ammonium phosphomolybdate and sodium phosphomolybdate is contained as said autoignition capability developing catalyst.

7. A gas generating composition according to Claim 1, wherein said material of said additive is a slag collector, and 0.5-5 weight % at least one metal nitride or metal carbide is contained as said slag collector.

8. A gas generating composition according to Claim 1, wherein said material of said additive is an auxiliary molding agent, and 0.05-2 weight % at least one water-soluble polymer selected from the group consisting of polyethylene glycol, polypropylene glycol, polyvinyl ether, copolymer of maleic acid and other polymerizable material, polyethyleneimine, polyvinyl alcohol, polyvinyl pyrrolidone, polyacrylamide, sodium polyacrylate and ammonium polyacrylate is contained as said auxiliary molding agent.

9. A gas generating composition according to Claim 7 or 8, wherein said material of said additive is a press-forming-use lubricant, and 0.1-1 weight % at

least one material selected from the group consisting of magnesium stearate, zinc stearate, graphite, boron nitride and molybdenum disulfide is mixed in said gas generating composition.

10. A gas generating composition according to Claim 1 or 7, wherein said material of said additive is an extrusion-molding-use binder, 1-15 weight cellulosic compound, polyvalent hydroxy compound, polyvinyl polymer, microbial polysaccharide or inorganic binder is contained as said extrusion-molding-use binder in said gas generating composition.

11. A gas generator in which said gas generating composition according to Claim 1 is loaded.

12. A gas generator in which said gas generating composition according to Claim 2 or 3 is loaded.